Operating Experience with Expansion Switches on Electric Furnaces

ASSOCIATION: Zavod "Krasnyy Oktyabr'" ("Krasnyy Oktyabr'" Works)

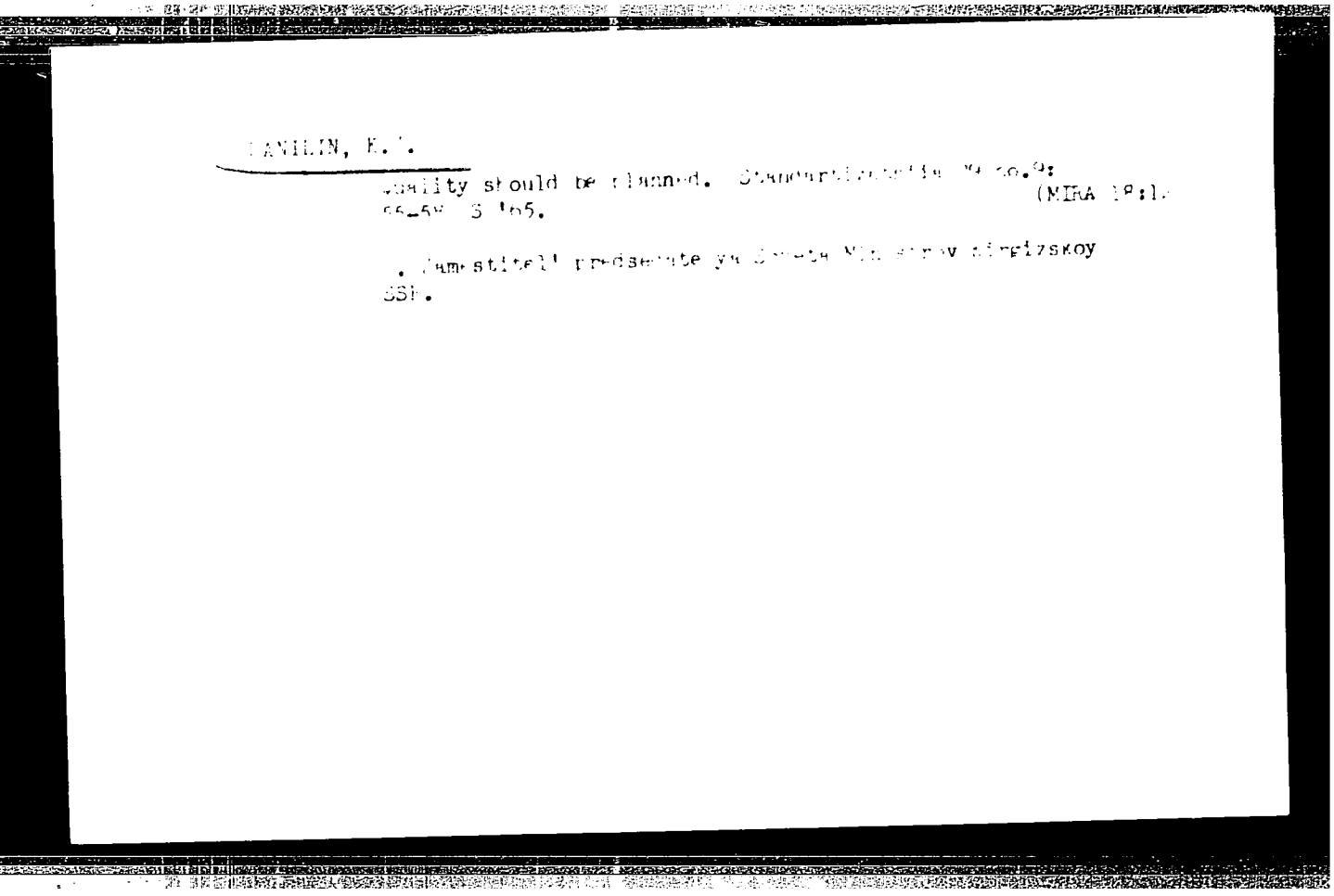
1. Switches--Performance 2. Electric Furnaces--Control systems

Card 2/2

PRZHEGORLINSKIY, D.F., inzh.; DANILIN, I.T., inzh.

Amplidyne transfer to a reduced rate. Stal' 23 no.12:1094 D '63.
(MIRA 17:2)

1. Yugenergochermet i Volgogradskiy metallurgicheskiy zavod "Krasnyy Oktyabr'".



ZAVILIN, E. I.

quality should be planned. Standartizatsiia 24 no.9:
(MIRA 18:1
65-5[illegible] 5 '65.

. Zamestitel' predsedatelya Gosudarstvennogo komiteta standartov Soveta Ministrov SSSR.

DANILIN, L.A.; DANILOV, V.K.; IVANKIN, N.I.

Four-beam pulsed oscillograph. Priborostroenie no.10:24-25 O '63. (MIRA 16:11)

L 09216-67 EWT(1)/EWT(m)
ACC NR: AP7002767 SOURCE CODE: UR/0089/66/021/002/0112/0116

AUTHOR: Danilin, L. D.; Lobov, S. I.; Pavlova-Verevkina, A. I.; Tsukerman, V. A. 24

ORG: none

TITLE: Radioactive source of soft X radiation for physical investigations, technology, and medicine

SOURCE: Atomnaya energiya, v. 21, no. 2, 1966, 112-116

TOPIC TAGS: radioisotope, x radiation

ABSTRACT: Characteristics and preparation methods for the developing radiation sources using ^{55}Fe are described. Uses of the soft x radiation from the isotope for investigations of atomic structure, microradiography, and medical purposes are discussed. Orig. art. has: 5 figures. [NA]

SUB CODE: 18 / SUBM DATE: 10Dec65 / ORIG REF: 007 / OTH REF: 001

Card 1/1 mk UDC: 621.384.60

0925 1645

DANILIN, M.

When the collective workers group said "no" to fires. Pozh.delo 6 no.7:3-5 Jl '60. (MIRA 13:7)

1. Nachal'nik dobrovol'noy pozharnoy druzhiny Moskovskogo mebel'no-derevoobrabatyvayushchego kombinata.
(Moscow--Woodworking industry--Fires and fire prevention)

DANILIN, M.A.

Organization of anesthesiological services in an oncological dispensary. Vop. onk. 6 no.7:97-100 Je '60. (MIRA 14:4)
(ANESTHESIOLOGY) (ONCOLOGY)

DANILIN, M.A.

Gastroscopy as a supplementary method of study of the stomach in an oncological clinic. Vop.onk. 7 no.5:91-96 '61. (MIRA 15:1)

1. Iz Velikolukskogo mezhrayonnogo onkologicheskogo dispansera (glavnyy vrach - zasl. vrach RSFSR S.Ya. Gen).
(GASTROSCOPY) (STOMACH---TUMORS)

DANILIN, M.A.; KUSHNER, G.M.; [illegible]

Oscillometric observations on cardiac activity in anesthetized patients. Vest. khir. 89 no.10:101-105 [illegible].

(MIRA 17:10)

1. Iz Velikolukskogo mezhrayonnogo onkologicheskogo dispansera (glavnyy vrach - zasluzhennyy vrach RSFSR S.Ya. [illegible]. Adres avtorov: Velikiye Luki, ulitsa Stavskogo, dom [illegible], Onkologicheskiy dispanser.

DANILIN, M.A.

Single-stage bronchoscopy and bronchgraphy under local anesthesia under dispensary conditions. Vest.khir. 87 no.11:114-115 N '61. (MIRA 15:11)

1. Iz Velikolukskogo mezhrayonnogo onkologicheskogo dispansera (gl. vrach - zasluzhennyy vrach RSFSR S.Ya. Gen).
(BRONCHOSCOPY) (BRONCHI--RADIOGRAPHY) (LOCAL ANESTHESIA)

YUKHNOVICH, A.N., veter. vrach (Yel'ninskiy rayon, Smolenskoy oblasti); RUDOMETKIN, Ya.S., veter. vrach; EVENTOV, M.Z., veter. vrach; SOBOLEV, A.S., dotsent (Estonskaya SSR); DOL'NIKOV, Yu.Ya., kand. veter. nauk; PALIMPSESTOV, M.A., prof.; SIMONENKO, N.M., dotsent; GONCHAROV, A.P., assistent; BEZRUKOV, A.A.; FROLENKOV, N.A., veter. vrach (Serov, Sverdlovskoy oblasti); KOSHCHEYEV, P.M.; VOROB'YEV, M.M., kand. veter. nauk; YANCHENKO, P.Kh., veter. vrach; AMELIN, I.P.; BYCHKOV, A.I., kand. veter. nauk; SHVYREV, G.I., veter. vrach (Stavropol'skiy kray); DANILIN, N.F.; TRUSHIN, A.Z., veter. vrach; SKRYPNIKOVA, T.K., veter. fel'dsher; MIKHEYEV, A.D.; KARMANOVA, Ye.M., kand. biol. nauk; REMIZOV, Ye.S., mladshiy nauchnyy sotrudnik; ANTIPIN, D.N., referent

From helminthological practice. Veterinariia 38 no.7:55-58 Jl '61. (MIRA 16:8)

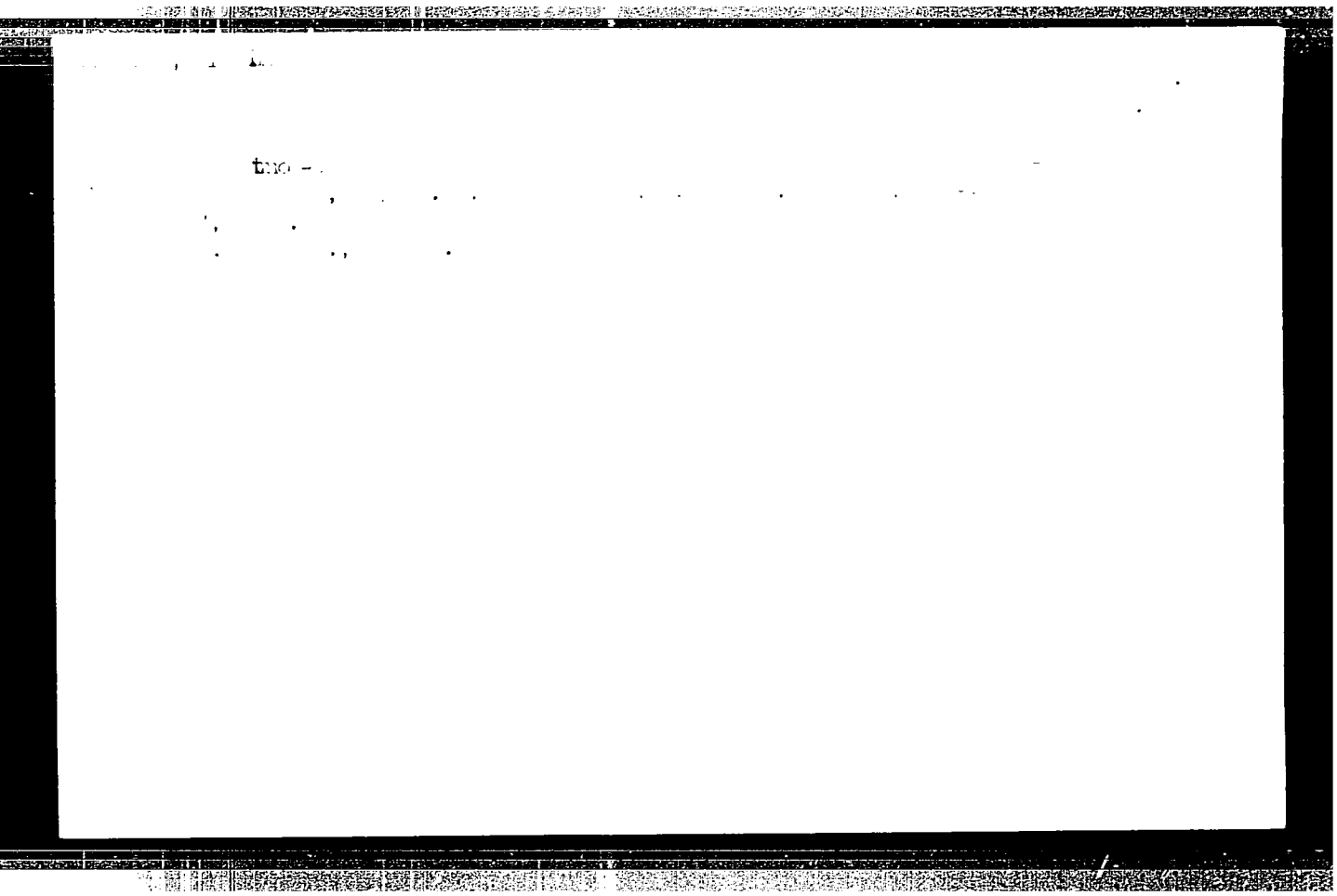
1. Reshetovskiy veterinarnyy uchastok, Novosibirskoy oblasti (for Rudometkin). 2. Sovkhoz "Buda-Koshelevskiy" Gomel'skoy oblasti (for Eventov). 3. Sibirskiy nauchno-issledovatel'skiy veterinarnyy institut (for Dol'nikov). 4. Khar'kovskiy veterinarnyy institut (for Palimpsestov, Simonenko, Goncharov). 5. Blagoveshchenskiy sel'skokhozyaystvennyy institut (for Bezrukov). 6. Novo-Nikolayevskiy veterinarnyy uchastok Krasnodarskogo kraya (for Lochkarev). 7. Karpilovskiy veterinarnyy uchastok Chernigovskoy oblasti (for Ponomarenko). 8. Kamalinskiy veterinarnyy uchastok Krasnoyarskogo kraya (for Koshcheyev).

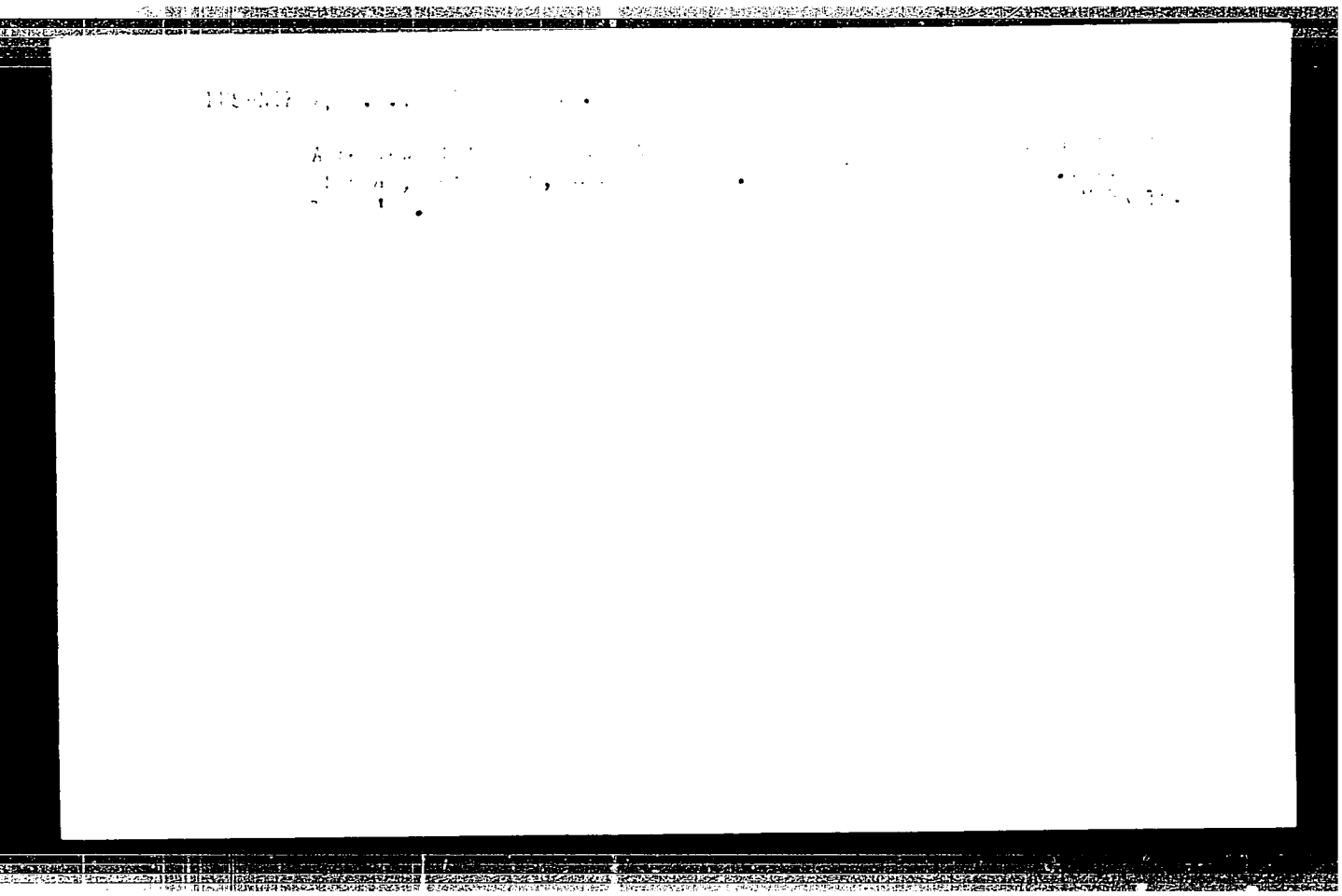
(Continued on next card)

YUKHNOVICH, A.N.---(continued) Card 2.

9. Novgorod-Severskaya meshrayonnaya veterinarnaya laboratoriya, Poltavskoy oblasti (for Vorob'yev). 10. Braginskaya rayonnaya veterinarnaya lechebnitsa, Gomel'skoy oblasti (for Yanchenko). 11. Nachal'nik veterinarnogo otdela Chelyabinskogo oblastnogo sel'skokhozyaystvennogo upravleniya (for Amelin). 12. Chelyabinskaya oblastnaya veterinarnyaya laboratoriya (for Bychkov). 13. Kaliningradskaya nauchno-issledovatel'skaya veterinarnaya stantsiya (for Danilin). 14. Sovkhoz "Rodina" Kikvidzenskogo rayona, Stalingradskoy oblasti (for Trushin, Skrypnikova). 15. Zaveduyushchiy Kirovo-Chepetskoy myaso-molochnoy i pishchevoy kontrol'noy stantsiyey, Kirovskoy oblasti (for Mikheyev). 16. Gel'mintologicheskaya laboratoriya AN SSSR (for Karmanova). 17. Zapadno-Kazakhstanskaya nauchno-issledovatel'skaya veterinarnaya stantsiya (for Remizov).

(Veterinary helminthology)





MURAV'YEV, I.V., inzhener; DANILIN, P.I., inzhener.

[Design and operation of railroad engines and machinery] Ustroistvo i ekspluatatsiia putevykh mashin i mekhanizmov. Moskva, Gos.transp. shel-dor. izd-vo, 1953. 558 p. (MLRA 7:2)
(Railroad motorcars) (Gas and oil engines) (Electric motors)

MURAV'YEV, Ivan Vladimirovich, inzhener; DANILIN, Pavel Ivanovich, inzhener; FISHCHUKOV, M.A., kandidat tekhnicheskikh nauk, redaktor; YERKINA, O.P., tekhnicheskiy redaktor

[Heavy track machinery] Putevye mashiny tiazhelogo tipa. Moskva, Gos.transp.zhel-dor. izd-vo, 1957. 387 p. (MIRA 10:11)
(Railroads--Track)

DANILIN, P. I.

Over-all mechanization of materials handling in machinery plants. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. no.12:67-69 '62.
(MIRA 16:1)

(Machinery industry)
(Materials handling)

DANILIN, P.I.

Over-all mechanization of conveying, loading and unloading and warehouse operations in enterprises of ferrous and nonferrous metallurgy. Mul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. no.1:76-78 '63. (MIRA 16:2)
(Metallurgical plants—Technological innovations)

ANILIN, P.I.

Over-all mechanizati n [illegible]oading, unloading and storing operations. Biul.tekh.-ek n.inform. [illegible] nauch.-issl.inst.nauch.-i tekh.inform. no.9:77-78 '63. (MIRA 16:10)

DANIL[illegible], I.Ya., cand tech sci -- (diss) "[illegible] elaboration, study and choice of parameters for [illegible] isolation of the damaged area in [illegible] power networks of 3[illegible] volts." [illegible], 1[illegible]

([illegible] SP) USSR. All-Union [illegible] Inst [illegible]

150 copies (KL, 50-[illegible], 124)

8(2)

SOV/112-59-1-818

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, p 109 (USSR)

AUTHOR: Danilin, P. Ya.

TITLE: Investigation of the Spring-Magnetic Mechanism of a Mining-Type Short-Circuiting Contactor

PERIODICAL: V sb.: Avtomatiz. i elektrifik. ugol'n. prom-sti. M., Ugletekhizdat, 1958, pp 66-100

ABSTRACT: Bibliographic entry.

Card 1/1

SHISHKIN, Nikolay Fedorovich, kand.tekhn.nauk; OLEKSEVICH, Valeriy Pavlovich; DANILIN, Petr Yakovlevich; MIKHEYEV, Yuriy Aleksandrovich; SYCHEV, Leonid Ivanovich. Prinimali uchastiye: SHALAGINOVA, T.S., inzh.; SMORODINSKIY, Ya.M., kand.tekhn.nauk; KALINICHENKO, M.F., inzh.; CHASHKIN, Ye.V., inzh.; ASTAF'YEV, V.D., inzh.; PROKOF'YEV, V.I., vedushchiy konstruktor; ROGOV, V.A., starshiy master; MOSKALENKO, V.M., laborant; GERASIMOV, N.F., laborant; POPOV, N.A., kand.fiziko-matem. nauk; KALINICHENKO, M.F., inzh.. LYUBIMOV, N.G., otv.red.; ALADOVA, Ye.I., tekhn.red.; PROZOROVSKAYA, V.L., tekhn.red.

[Protection of the electric equipment and cable networks in mines] Zashchita shakhtnykh elektroustanovok i kabel'nykh setei. Pod red. N.F.Shishkina. Moskva, Ugletekhizdat, 1959. 242 p. (MIRA 12:3)
(Electricity in mining) (Electric cables)

SHISHKIN, Nikolay Fedorovich; DANILIN, Petr Yakovlevich; LYUBIMOV, N.G., otv.red.; GALANOVA, V.V., tekhn.red.

[Superfast switching apparatus] Sverkhbystrodeistvuiushchii kommutatsionnyi apparat. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 34 p. (MIRA 13:7)
(Electric switchgear)

SHISHKIN, N.F., kand.tekhn.nauk (Moskva); DANILIN, P.Ya., kand.tekhn.nauk (Moskva)

Combined method of switching for power networks. Elektrichestvo no.7:47-50 Jl '60. (MIRA 13:8)
(Electric switchgear)

POLUYAN, I.G.; ZINATULLINA, A.M.; DANILIN, R.A.; RAFIKOV, R.A.

Results of the experimental exploitation and testing of limestone of the Tournai stage in the Bavly field. Nefteprom. delo no.10:8-13 '63. (MIRA 17:6)

1. Neftepromyslovoye upravleniye "Bavlyneft'".

GAYNANSHIN, I.G.; ZINATULLINA, A.M.; DANILIN, R.A.; RAFIKOV, R.A.

Stimulating the recovery of oil in the Bavly field by using surfactants. Neftepром. delo no.2:24-26 '64. (MIRA 17:4)

1. Neftepromyslovoye upravleniye "Bavlyneft'".

DANILIN, S.; KOP'YEVSKIY, I.

Bricklayers

At the head of the competitors. [illegible]

9. Monthly List of Russian Accessions, Library of Congress, [illegible], Incl.

DANILIN, S.A.

Tissue emulsions bring profits to swine breeding. Veterinariia 34 no.10:31 O '57. (MLRA 10:11)

1. Zaveduyushchiy svinofermoy, Kolhoz "Put' Lenina," Starozhilovskogo rayona Ryazanskoy oblasti.
(Tissue extracts) (Starozhilovo District--Swine)

L 46955-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6031733 (A) SOURCE CODE: UR/0182/66/000/009/0038/0038

40
B

AUTHOR: Mokhov, A. I.; Danilin, S. I.

ORG: none

TITLE: Improved heating conditions for 1Kh16N4B steel ingots and billets

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 9, 1966, 38

TOPIC TAGS: stainless steel, steel ingot heating, ~~stainless ingot~~ metal forging/ 1Kh16N4B stainless steel

ABSTRACT: The Volgograd Machine Building Plant makes ring forgings from 3.7-ton 1Kh16N4B stainless-steel ingots. Until recently the heating of ingots required 35—40 hr. Now, cold ingots are charged into a furnace having a temperature of max 1000C and held at this temperature for 4—5 hr. The total heating time was reduced to 15—17 hr. It was found that this accelerated heating procedure yielded forgings with satisfactory macro- and microstructure and mechanical properties. The respective tensile strength of tangential and longitudinal specimens was 134.2 and 134.0 kg/mm^2, yield strength 118.7 and 98.7 kg/mm^2, elongation 13.7—10.7%, reduction of area 53.5—51.0% and notch toughness 8.7—11.5 mkg/cm^2, all greatly exceeding the requirements of specifications. Orig. art. has: 2 tables. [ND]

SUB CODE: 13/ SUBM DATE: none/ ATD PRESS: 5088

Card 1/1 JS UDC: 621.78.5

DANILIN, S.S.

Fifth Session of the Academy of Construction and Architecture of the U.S.S.R. Izv. ASiA no.1:94-101 '60. (MIRA 13:9)

1. Zamestitel' rukovoditelya otdela nauchnykh izdaniy Akademii stroitel'stva i arkhitektury SSSR.
(Building--Congresses)

DANILIN, S.S.

First issue of "Experimental Designing". Izv. ASIA no.2:127-128 '60. (MIRA 13:7)
(Architecture--Periodicals)

DANILIN, S.S.

Sixth Session of the Academy of Construction and Architecture of the U.S.S.R. Izv. ASiA no.1:102-106 '61. (MIRA 14:7)
(City planning)

DANILIN, V.

A valuable invention. Prom.koop. 14 no.8:16-17 Ag '60.
(MIRA 13:8)

1. Zamestitel' nachal'nika planovo-proizvodstvennogo otdela Mosobltekstil'promsoyuza.
(Winding machines)

DANILIN, V.

Under public control. NTO 5 no.6:51-52 Je '63. (MIRA 16:9)

1. Uchenyy sekretar' soveta nauchno-tekhnicheskogo obshchestva Volgogradskogo metallurgicheskogo zavoda "Krasnyy Oktyabr'".

DANILIN, V. A.

On the non-hemoglobic iron level in blood in healthy subjects and in liver diseases. Klin. med., Moskva 29 no.8:90 Aug 1951. (CLML 20:11)

1. Of the Hospital Therapeutic Clinic (Director -- Prof. A. I. Germanov), Kuybyshev Medical Institute.

DANILIN, V. A.

Dissertation: "Nonhemoglobic Iron in the Blood Serum in Botkin's Disease." Cand Med Sci, Kuybyshev Medical Inst, Kuybyshev, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 6. Mar 54)

SO: SUM 243, 19 Oct 54

133-6-24/33

AUTHORS: Babakov, A.A., Zhadan, T.A., Danilin, V.A., Bakuma, S.F., Antipov, K.I., Kul'kova, M.N. and Kupryakhina, S.Z.

TITLE: An improvement in the technology of production of high-chromium plates. (Uluchsheniye tekhnologii proizvodstva vysokokhromistogo tolstogo lista).

PERIODICAL: "Stal'" (Steel), 1957, No.6, pp.555-559 (USSR).

ABSTRACT: Optimum conditions of rolling and subsequent heat treatment of plates from steels Kh25T, Kh28 and Kh28 with nitrogen, under which the metal would attain mechanical properties satisfying TU5227-55 and good quality cutting and straightening properties in cold state, were investigated. The following participated in the work: Engineers B.Z.Kononov, V.V.Turitsyn, P.N.Sporyshkov, A.P.Okenko ("Krasnyy Oktyabr") and technician V.I.Shashina (TsNIICHM). It was found that in order to obtain steel plates of required properties slabs should be rolled in a temperature range from 980 to 1000 C - 720 to 800 C with cooling of plates in air. Thermal treatment: a preliminary annealing at 760-780 C for 12-16 hours followed by hardening of each plate (individually) in water after heating the metal to the same temperature (soaking time 3 min per 1 mm thickness of the plate). Chemical composition of steel from the heats

Card 1/2

investigated is given in Table 1, mechanical properties of plates tested in Tables 2 to 6 and some examples of microstructure obtained under various conditions of processing in Figs. 2 to 4.

There are 6 tables and 4 figures.

ASSOCIATION: TsNIIChM and "Krasnyy Oktyabr'" Works. (TsNIIChM i zavod "Krasnyy Oktyabr'").

AVAILABLE: Library of Congress

DANILIN, V.A., dots. PLAVINSKAYA, N.Ya., kand.med.nauk

Clinical picture of acute leukoses. Sov.med. 22 no.5:49-54 My '58

1. Iz kliniki gospital'noy terapii (zav. - prof. A.I. Germanov) i kliniki propedevticheskoy terapii (zav. - prof. S.V. Shestakov) Kuybyshevskogo meditsinskogo instituta.

(LEUKEMIA, manifest.
clin. manifest. (Rus))

DANILIN, V.A.; GORYAYNOVA, N.S.

Treatment of pneumonias with phenoxymethylpenicillin. Terap. arkh. 32 no. 6:68-71 Je '60. (MIRA 14:1)
(PENICILLIN) (PNEUMONIA)

DANILIN, V.A., dotsent

Rare case of diabetes insipidus developing during the course of pregnancy. Akush.i gin. no.6:98-99 '61. (MIRA 14:12)

1. Iz gospital'noy terapevticheskoy kliniki (zav. - prof. A.I. Germanov) Kuybyshevskogo meditsinskogo instituta.
(PREGNANCY, COMPLICATIONS OF) (DIABETES)

DAVILIN, V.A., dotsent; KIM V"YEN

Case of subphrenic abscess with exudative pericarditis and pleurisy. Klin.med. no.4:144-145 '62. (MIRA 15:5)

1. Iz terapevticheskogo otdeleniya gospitalya kkhmero-sovetskoy druzhby, g. Pnom-Pen'.
(PERICARDITIS) (PLEURISY) (DIAPHRAGM--ABSCESS)

DANILIN, V.F., starshiy nauchnyy sotrudnik.

Fusel oils in veterinary practice. Veterinariia 32 no.11:76-77 N '55. (MLRA 8:12)

1. Kaliningradskaya VOS.
(FUSEL OIL) (VETERINARY MATERIAL MEDICA AND PHARMACY)

DANILIN, V.P.

Some characteristics of prophylactic measures for treating Fasciola and Dictyocaulus infestations in cattle. Trudy Gel'm. lab. 9:87-88 '59. (MIRA 13:3)

(Parasites--Cattle) (Nematoda) (Liver fluke)

BELUGIN, D.A., kandidat voyennykh nauk, polkovnik; ZVEREV, V.Ya., polkovnik; DANILIN, V.N., inzhener-polkovnik; VOROB'YEV, P.A. polkovnik, redaktor; KONOVALOVA, Ye.K., tekhnicheskiy redaktor.

[Artillery reconnaissance by instruments; a textbook for artillery schools] Artilleriiskaia instrumental'naia razvedka; uchebnik dlia artilleriiskikh uchilishch. Moskva, Voen.izd-vo M-va obor.SSSR, 1956. 483 p. (MLRA 10:6)
(Military reconnaissance)
(Artillery, Field and mountain)

Danilin, V.I.

Influence of [illegible] conditions on cracking of ingots. V. A. Efimov, [illegible] and M. [illegible] (Inst. [illegible] S.S.R., Plant "Krasnyi Oktyabr'"). [illegible] 601-[illegible] (19[illegible]).—Detg. shrinkage of ingots in molds provided with suitable gages showed that the contraction of steel cast at the same temp. is a function of steel compn.; max. shrinkage was observed in 0.18-0.20% C and the least in 0.[illegible]% C steels, the former showing a max. cracking in rolling. Plastic properties of freezing steel are detd. by the ratio of solid and liquid phases in the interval of crystn., and its width is proportional to the C content. Plastic deformation of a solidifying skin is taken care of by the free motion of liquid metal among its dendrites. J. D. Gat

MG

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YEFIMOV, V.A.; DANILIN, V.I.; LAPSHOVA, M.P.

Shrinkage and plasticity of 6-ton steel ingots in the process of solidification. Vop.proizv.stali no.3:144-160 '56. (MLRA 9:11)
(Steel ingots)

18(5) PHASE I BOOK EXPLOITATION SOV/1907

Akademiya nauk Ukrainskoy SSR. Kiyev Otdeleniye tekhnicheskikh nauk

Voprosy proizvodstva stali vyp.6 (Problems of Steel Production, Nr 6) Kiyev, Izd-vo AN Ukrainskoy SSR, 1958. 137 p. Errata slip inserted. 2,000 copies printed.

Resp. Ed.: N.N. Dobrokhotov, Academician, Ukr. SSR Academy of Sciences; Ed. of Publishing House: N.N. Labinova; Tech. Ed.: V.I. Yurchishin.

PURPOSE: This book is intended for engineers and scientific personnel in the field of steel production.

COVERAGE: This is a collection of articles dealing with various aspects of the production of steel, including the designing of open-hearth furnaces, thermal processes in the furnaces, thermodynamics of steel-making processes, technology of producing high-grade steel, and changes in the size and shape of ingots. Other topics discussed are the properties of chrome-manganese stainless steels, improvement of ball-bearing steel, ingot defects, ingot quality as determined by temperature of teeming and shape of mold, and certain aspects of steel rolling. Some of the articles are accompanied by references, both Soviet and non-Soviet.

AVAILABLE: Library of Congress

GO/hg
7-28-59

Card 4/4

SOV/137-59-5-9863

Translation from Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, p 57 (USSR)

AUTHORS Tarashchuk, N.T., Klement'yev, V.V., Danilin, V.I., Lapshova, M.P., Lisov, I.V.

TITLE Smelting Chrome-Nickel Steels in Open Hearth Furnaces With the Use of Clotted Nickel Monoxide

PERIODICAL Stalingr. prom-st' (Sovnarkhoz Stalingr. ekon. adm. r-na), 1958, Nr 2 - 3, pp 25 - 28

ABSTRACT Clotted Ni monoxide was used instead of granulated Ni in Cr-Ni steel smelting in 50-ton open-hearth furnaces of the "Krasnyy Oktyabr'" plant. Clotted Ni monoxide was added to the charge or during the refining stage in ar amount of 1,000 to 1,800 kg per smelt. The smelting process was characterized by intensified boiling, particularly during the first 10 minutes after addition of Ni monoxide. Assimilation of Ni, already 5 minutes after its addition, was 98.5% on the average, the rate of burning-out of C was 0.38% per hour. If Ni monoxide was added to the refining pool, the smelting time was reduced by 33 minutes.

Card 1/2

Smelting Chrome-Nickel Steels in Open Hearth Furnaces With the Use of Clotted Nickel Monoxide

and the bubbling and final stage by 28 minutes. If the monoxide was added to the charge, the smelting time did not change. The addition of Ni monoxide instead of granulated Ni did not affect the mechanical properties, the degree of anisotropy, the macrostructure, the slatiness, and flake sensitivity of the steel. The prime cost of the steel was reduced.

S.I.

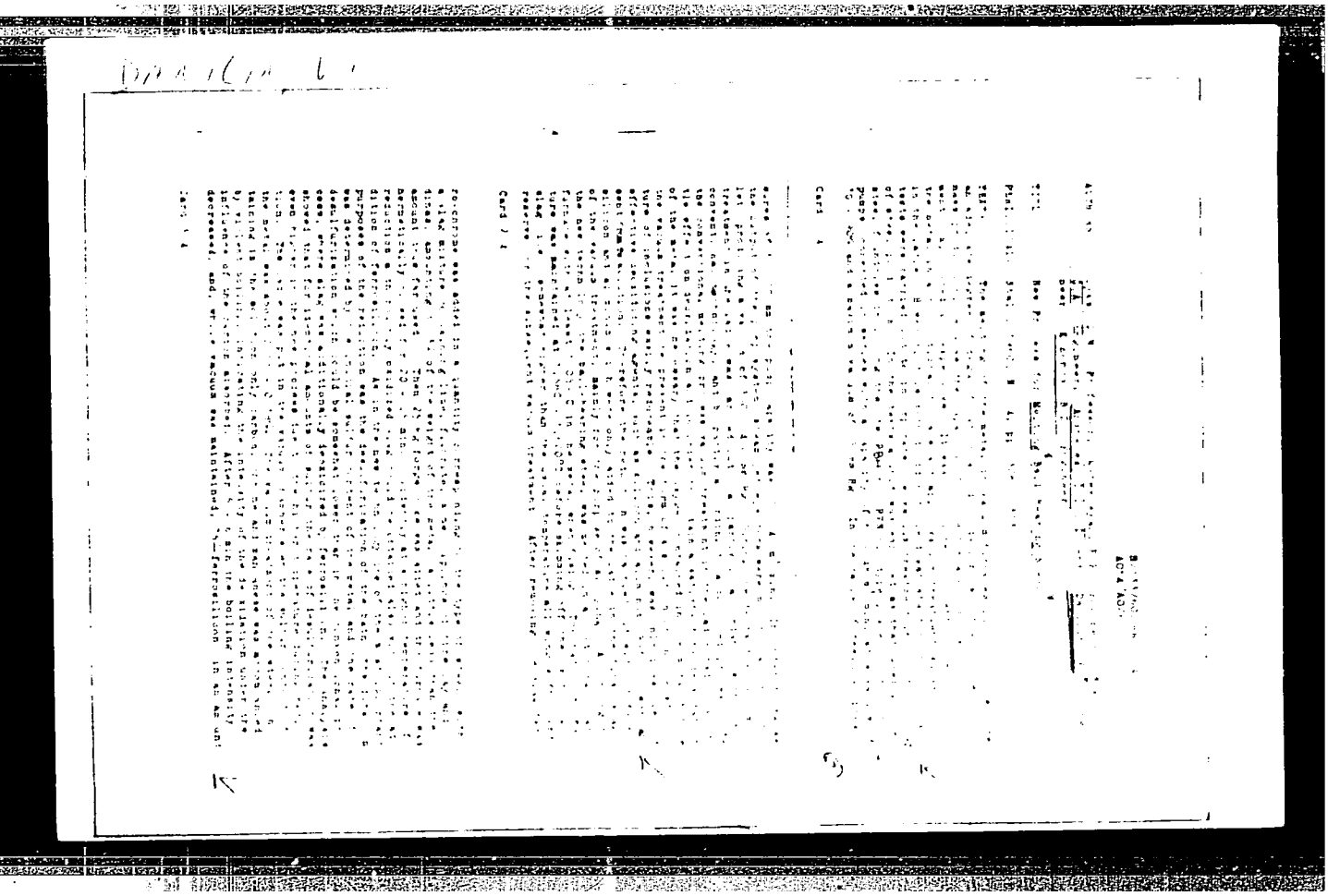
DANILIN

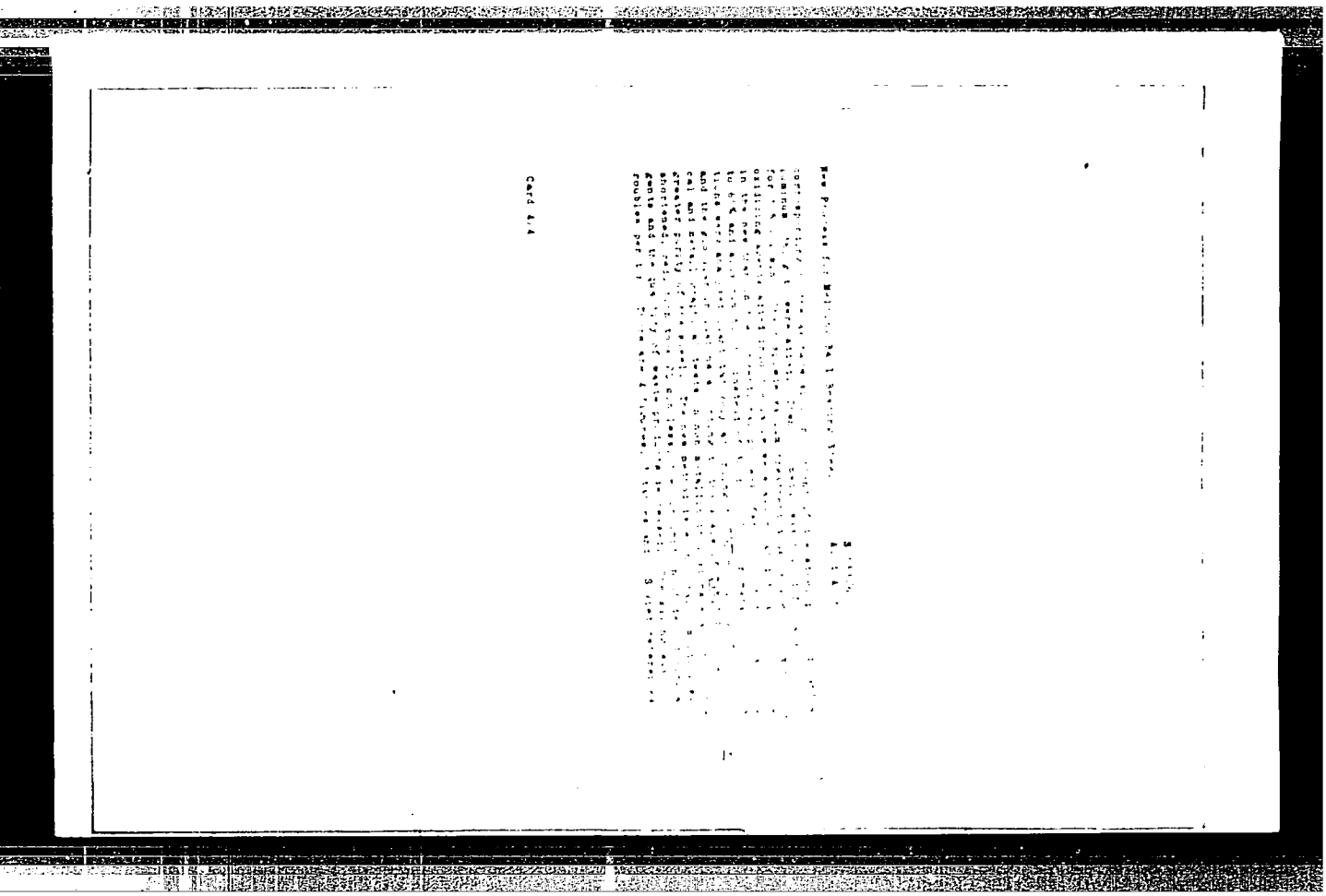
ДЕГАЗАЦИЯ СТАЛИ И СПЛАВОВ

[illegible]	[illegible]
[illegible]	[illegible] стали.
Г.Н.[illegible]	[illegible]
А.М.[illegible]	[illegible]
Г.Н.Ойкс [illegible]	[illegible] стали [illegible] вакуума.
[illegible]	[illegible] в вакууме.
[illegible]	[illegible] стали.
[illegible]	[illegible] стали ШХ15СГ.

11

report submitted for the 5th Physical Chemical Conference on Steel Production, Moscow-- 30 Jun 1959.





YEFIMOV, Viktor Alekseyevich; LAPITSKIY, V.I., prof., doktor tekhn.nauk, retsenzent; YAKOVLEV, Yu.N., kand.tekhn.nauk, retsenzent; DANILIN, V.I., retsenzent; DOBROKHOTOV, N.N., akademik, red.; GROMOV, M.D., red.izd-va; VAYNSHTEYN, Ye.B., tekhn.red.

[Steel ingots; casting and formation of the ingot] Stal'noi slitok; razlivka stali i formirovanie slitka. Pod red. N.N.Dobrokhotova. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 356 p. (MIRA 14:3)

1. AN USSR (for Dobrokhotov). 2. Nachal'nik TSentral'noy zavodskoy laboratorii zavoda "Krasnyy Oktyabr'" (for Danilin).
(Steel ingots)

84

PHASE I BOOK EXPLOITATION SOV/5556

Moscow. Institut stali.

Novoye v teorii i praktike proizvodstva martenovskoy stali (New [Developments] in the Theory and Practice of Open-Hearth Steelmaking) Moscow, Metallurgizdat, 1961. 439 p. (Series: Trudy Mezhvuzovskogo nauchnogo soveshchaniya) 2,150 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy institut stali imeni I. V. Stalina.

Eds.: M. A. Glinkov, Professor, Doctor of Technical Sciences, V. V. Kondakov, Professor, Doctor of Technical Sciences, V. A. Kudrin, Docent, Candidate of Technical Sciences, G. N. Oyks, Professor, Doctor of Technical Sciences, and V. I. Yavoyskiy, Professor, Doctor of Technical Sciences; Ed.: Ye. A. Borko; Ed. of Publishing House: N. D. Gromov; Tech. Ed.: A. I. Karasev.

PURPOSE: This collection of articles is intended for members of scientific institutions, faculty members of schools of higher education, engineers concerned with metallurgical processes and physical chemistry, and students specializing in these fields.

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COVERAGE: The collection contains papers reviewing the development of open-hearth steelmaking theory and practice. The papers, written by staff members of schools of higher education, scientific research institutes, and main leboratories of metallurgical plants, were presented and discussed at the Scientific Conference of Schools of Higher Education. The following topics are considered: the kinetics and mechanism of carbon oxidation; the process of slag formation in open-hearth furnaces using in the charge either ore-lime briquets or composite flux (the product of calcining the mixture of lime with bauxite); the behavior of hydrogen in the open-hearth bath; metal desulfurization processes; the control of the open-hearth thermal melting regime and its automation; heat-engineering problems in large-capacity furnaces; aerodynamic properties of fuel gases and their flow in the furnace combustion chamber; and the improvement of high-alloy steel quality through the utilization of vacuum and natural gases. The following persons took part in the discussion of the papers at the Conference: S.I. Filippov, V.A. Kudrin, M.A. Glinkov, B.P. Nam, V.I. Yavoyskiy, G.N. Oyks and Ye. V. Chelishchev (Moscow Steel Institute); Ye. A. Kazachkov and A. S. Kharitonov (Zhdanov Metallurgical Institute); N.S. Mikhaylets (Institute of Chemical Metallurgy of the Siberian Branch of the Academy of Sciences USSR); A.I. Stroganov and D. Ya. Povolotskiy (Chelyabinsk Polytechnic Institute); P.V. Umrikhin (Ural Polytechnic Institute); I.I. Fomin (the Moscow "Serp i molot" Metallurgical Plant); V.A. Fuklev (Central Asian Polytechnic Institute)

and M.I. Beylinov (Night School of the Dneprodzerzhinsk Metallurgical Institute). References follow some of the articles. There are 268 references, mostly Soviet.

TABLE OF CONTENTS:

32598

S/137/61/000/011/028/123
A060/A101

18 32 0D

AUTHORS: Oyks, G.N., Danilin, V.I., Ansheles, I.I., Sokolov, G.A., Kononov, B.Z.

TITLE: Production of ball-bearing steel with the use of ladle-vacuuming of the unreduced metal

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 59, abstract 11V346 (V sb. "Novoye v teorii i praktike proiz-va martenovsk. stali", Moscow, Metallurgizdat 1961, 335-342 Discuss 428 - 439)

TEXT: According to the new technique the smelting of ball-bearing steel in basic furnaces is carried out with complete oxidation and resmelting. The oxidation period is carried out forcedly with the use of ore. The vat temperature before the elimination of the oxidizing slag is 1,590-1,620°C. After drawing off the oxidizing slag and correcting the metal with respect to its C content, Cr and Mn content, one adds in a single dose a slag mixture (3% of the weight of the metal) consisting of lime, spar, chamotte and Dinas block. Then a portion of ground coke is put on top of the slag, the furnace is hermetically closed and soaking proceeds for 20-25 min. After attaining an S content of [illegible] 0.08% the smelt is

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Production of ball-bearing steel ...

...ed out into a ladle together with the slag. In the course of vacuum treating the unreduced metal in the ladle, a vigorous bubbling proceeds and takes 5-6 min. Thereupon 75% Fe-Si and Al are introduced from a special bunker under vacuum. At the end of the vacuuming the metal is cast into 4.1 ton ingots. The quality of the steel was determined by the statistical method from a large number of heats smelted according to the experimental and the usual techniques. The quality of the metal obtained was better. The nonmetallic impurity content constituted 0.002-4% as compared to 0.00410%. The dimensions of the globules in the metal of the ordinary heats is 16-18 μ, and in the experimental heats up to 10 μ. The task of the reducing period of the heat according to the new technique is the application of active desulfurating slag and the correction of the chemical composition. The mean duration of that period is 1.32 hrs as compared to 1.70 hrs in ordinary heats, the total heat duration was shortened by 30 min, and the reducer expenditure was decreased considerably, as result of which the production cost of steel was decreased by 15 rub per ton.

Yu. Nekrasov

Abstracter's note: Complete translation

Card 2/2

S/137/61/000/008/009/037
A060/A101

AUTHORS: Danilin, V. I., Ansheles, I. I., Sokolov, G. A., Kononov, B. Z.

TITLE: New technique for producing ball-bearing steel under vacuum

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1961, [illegible], abstract 8V219 (V sb. "Fiz.-khim. osnovy proiz-va stali". Moscow, Metallurgizdat, 1961, 466-473)

TEXT: The authors describe the results of an investigation of the quality of ball-bearing steel smelted by a new technique involving the use of vacuum at the plant "Krasnyy Oktyabr'". The new technique provides for the reduction of the metal in a Fe-Mn furnace, and that of the slag - by ground coke. The metal is subjected to vacuum treatment in the ladle at an end pressure of 4 - 8 mm of mercury for a period of 8 - 10 min. About two minutes before the end of the vacuum treatment one introduces 3.6 kg/ton of 75% Fe-Si and 0.15 kg/ton of Al, and thereupon the metal is poured in air. The technique described ensures a maximum utilization of the reducing properties of C and a high degree of assimilation of Si (90%) and Al (56%). The shift to the new technique has led to a

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S/13[illegible]/61/[illegible]/008/009/0[illegible]
A060/A101

New technique for producing ...

lowering of non-metallic impurities in the finished steel, and also to a reduction in the duration of the reduction process and reduction in the expenditure of deoxidizing agents.

V. Shumskiy

[Abstracter's note: Complete translation]

Card 2/2

S/133/61/000/005/004/009
A054/A133

AUTHORS: Osipov, V.P., Engineer; Yefimov, V.A., Candidate of Technical Sciences; Matevosyan, P.A., Engineer; Danilin, V.I., Engineer; Lapshova, M.P., Engineer; Selivanov, V.M., Engineer; Lisov, I.V., Engineer

TITLE: Pouring of high-alloy steels

PERIODICAL: Stal', no. 5, 1961, 415 - 418

TEXT: When stainless steel is poured, the surface layers of the ingot are deteriorated by folds, blisters and pock marks, which are mainly the result of oxides and gases in the metal. To avoid such defects, tests were carried out with pouring low-melting synthetic slags on the metal surface in the ingot mold. The hot- liquid slag decreases heat losses through radiation and checks the oxidation of the metal. The main purpose of the tests was to determine the effect of various factors on the formation of defects and the most suitable composition of synthetic slags to be used in this process. The slags were melted in a 20-ton single-phase arc furnace with conductive graphite bottom. The low-melting constituents (fluorite, cryolite) were charged at first, on the bottom, next the

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Pouring of high-alloy steels

other materials. The melting of a 50-kg batch of synthetic slag took 1 - 1 1/2 h. The slag was poured into a ladle and from this into the mold. When the metal level in the mold had risen to about 150 - 200 mm, about 15 - 16 kg slag was poured on its surface. In the tests X23H18 (Kh23N18) and 1X18H9T (1Kh18N9T) steel was bottom-cast into 4.1-ton ingots. Simultaneously with pouring into uncoated molds with synthetic slag, metal was also poured into lacquer-coated molds for comparison. Four types of slags were used with the following composition:

group	CaF_2	Na_3AlF_6	SiO_2	Al_2O_3	CaO	MgO	MnO
I	35—40	—	35—40	10—15	10—15	—	—
II	33.3	33.3	—	—	33.3	—	—
III	—	—	50	—	20	15	15
IV	—	75	—	—	25	—	—

The best results were obtained with Group-I slags which are light grey-bluish when solid; when liquid, they humidify the metal very thoroughly. During smelting Kh18N9T steel, the slag composition changed as follows (numerator: composition before smelting; denominator: after smelting):

SiO_2	CaO	MnO	TiO_2	Cr_2O_3	FeO	Al_2O_3	F	Na
35.4	37.12	0.31	0.35	0.48	0.11	11.42	14.30	2.12
32.72	35.99	1.50	6.17	1.74	0.97	13.16	13.40	1.00

It can be seen that synthetic slag adsorbs chrome and titanium oxides, which is promoted by the presence of CaO, moreover by CaF_2, Na_3AlF_6 (cryolithe) and Na_2SiO_3

Pouring of high-alloy steels

soluble glass). The adsorption of chrome and titanium oxides takes place also very rapidly. When 1Kh18N9T steel is poured into the mold to half its capacity, the titanium oxide content of slag increased from 0.6 to 2.5%, the chrome oxide content from 0.03 to 0.8%, while, when pouring was finished, the content of the above oxides increased to 3 and 1%, respectively. No folds were observed in the ingots which were poured under Group-I slags. The ingot surface was covered with a thin slag layer (like "enamel"), the thickness of which between ingot and mold-wall on the edges was 0.3 - 0.5 mm, on the angles 3 mm. The test ingots had a flawless, smooth surface, while in the check-ingots the usual folds in the upper part and blisters in the lower part were found. Due to the synthetic slag layer, the intensity of heat removal from the ingot surface decreased 1.4 times; the shrinkage stresses in the ingot case also became lower. The intensity of shrinkage decreased and, moreover, the liquid slag flowed into the pores of the mold, hereby eliminating the delay of shrinkage and promoting the contraction of the ingot along the mold wall. The mechanical properties of synthetic slag-treated steels are partly equal to those of the conventional steels (strength limit and relative elongation), in some respects they are even better. In the test specimens of synthetic slag-treated 1Kh18N9T and X18N12M2T (Kh18N12M2T) steels no intercrystalline corrosion could be observed during the tests. There are 2 figures,

Card 3/4

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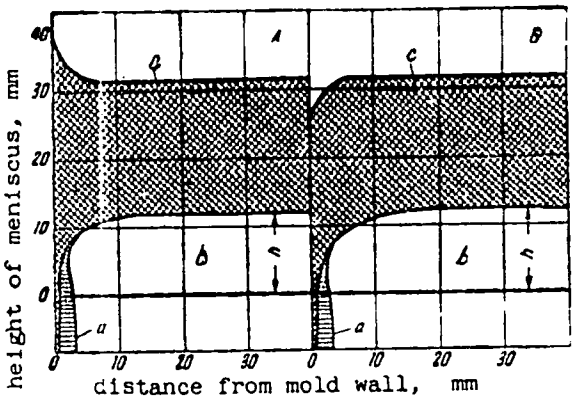
A054/A133

Pouring of high-alloy steels

2 tables and 3 Soviet-bloc references.

Figure 2: Effect of coating on the forming of the external ingot surface when pouring under synthetic slag. A - without coating; B - the mold is graphite-coated (a - solidifying steel; 2 - liquid steel; 3 - liquid slag).



Card 4/4

BEREZIN, P.G., kand.tekhn.nauk, dotsent; DANILIN, V.I., inzh.; ZVEREV, A.A.,inzh.; YELISTRATOV, S.S., dotsent; ZAMECHNIK, F.F., inzh.; REDIN, P.P., inzh.

Improving the quality of cast iron for molds. Stal' 21 no.6:571-575 Je '61. (MIRA 14:5)

1. Stalingradskiy mekhanicheskiy institut i zavod "Krasnyy Oktyabr'."
(Cast iron) (Ingot molds)

DANILIN, V.I.

PHASE I BOOK EXPLOITATION SOV/6329

Oyks, Grigoriy Naumovich, Paruir Apetnekovich Matevosyan, Il'ya Iosifovich Ansheles, Vladimir Ivanovich Danilin, Gennadiy Anisimovich Sokolov, Ivan Aleksandrovich Baranov, and Viktor Mikhaylovich Selivanov.

Novaya tekhnologiya vyplavki sharikopodshipnikovoy stali (New Technology of Melting Ball-Bearing Steel). Moskva, Metallurgizdat, 1962. 124 p. Errata slip inserted. 2250 copies printed.

Ed. of Publishing House: V. I. Ptitsyna; Tech. Ed.: P.G. Islent'yeva.

PURPOSE: This book is intended for metallurgical engineers of steel-melting shops and central plant laboratories. It may also be useful to students at tekhnikums and metallurgical schools of institutions of higher learning.

COVERAGE: The book reviews the new technology of making ball-bearing steel, which was introduced at the "Krasnyy Oktyabr'" Metallurgical Plant in Volgograd. Vacuum degassing of metal is discussed as

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an intermediate technological stage of the melting process. A brief outline of the conventional method of melting ball-bearing steel is presented, along with advantages offered by the new technology, which ensures an improved steel quality. Designs of vacuum-units of the Plant are described. The book also reviews experiments in making silicon-free ball-bearing steel by double vacuum degassing. The quality of steel produced for several years by the new melting technology is discussed in detail. No personalities are mentioned. There are 61 references: 56 Soviet, 3 German, and 2 English.

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DANILIN, V.I.

PHASE I BOOK EXPLOITATION SOV/6329

Oyks, Grigoriy Naumovich, Fanuil Apetnekovich Matevosyan, Il'ya Yosifovich Anashkin, Vladimir Ivanovich Danilin, Gennadiy Anisimovich Sokolov, Ivan Aleksandrovich Zhukov, and Viktor Mikhaylovich Selivanov.

Novaya tekhnologiya vyplavki sharikopodshipnikovoy stali (New Technology of Melting Ball-Bearing Steel). Moskva, Metallurgizdat, 1962. 124 p. Errata slip inserted. 2250 copies printed.

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Card 1/4

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TABLE OF CONTENTS:

BEREZIN, P.G.; DANILIN, V.I.; YELISTRATOV, S.S.; ZVEREV, A.A.; ZAMECHNIK, F.F.

Efficient technology for the founding of large cast iron ingot molds. Stal' 23 no.2:181-184 F '63. (MIRA 16:2)

1. Volgogradskiy mekhanicheskiy institut i zavod "Krasnyy Oktyabr'".
(Iron founding) (Ingot molds)

L 45219-65 EWT(m)/EWP(z)/EWA(c)/T/EWP(b)/EWA(d)/EWP(t) MJW/JD
ACCESSION NR: AP5008386 S/0148/65/000/003/0053/0058

AUTHOR: Vinnichenko, Ye. V.; Kosterev, L. B.; Yavoyskiy, V. I.; Danilin, V. I.; Selivanov, V. M.; Fedan, A. T.

37
26
B

TITLE: Experiments with molten slag degassing of steel

SOURCE: IVUZ. Chernaya metallurgiya, no. 3, 1965, 53-58

TOPIC TAGS: degassing, slag, chromium steel

ABSTRACT: Degassing experiments done on four grades of steel: 1Kh13, Kh17, Kh23N18 and Kh23N13. A low-viscosity basic synthetic slag was prepared in an electric furnace and mixed with the steel in an intermediate vessel before teeming. Melt temperatures, gas content, and slag chemical composition were checked during the process. It was found that with properly prepared slag and good contact of slag and metal the original hydrogen content of the metal may be reduced by 20-30%. Another index of degassing is the hydrogen content of the slag at the start of refinement. Several concomitant mechanisms for degassing are adduced including the volatilization of *HF*. At some distance from the electrode, it is possible that the reverse process occurs, i.e. the solution of hydrogen in slag, but the dominant pro-

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ACCESSION NR: AP5008386

cess is the desorption of hydrogen, particularly desorption at the electrode. The regular relationship between the absolute lowering of hydrogen content and the gas saturation of steel when the temperature of the refining slag is above 1340°C is shown. Simultaneous investigations of the nitrogen content in the metal showed that while some titanium nitrides do adhere to coarse inclusions in the slag, the use of molten slag for degassing does not reduce the nitrogen content of the steel. "M. M. Kulkova, L. T. Shepel', I. N. Zimina, K. V. Belyakova, A. S. Spirin and A. F. Sen'kin participated in the work." Orig. art. has: 4 figures, 2 tables, 5 formulas.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys); Metallurgicheskiy zavod "Krasnyy Oktyabr'" (Krasnyy Oktyabr' Metallurgical Plant)

SUBMITTED: 16Nov64 ENCL: 00 SUB CODE: MM

NO REF SOV: 004 OTHER: 003

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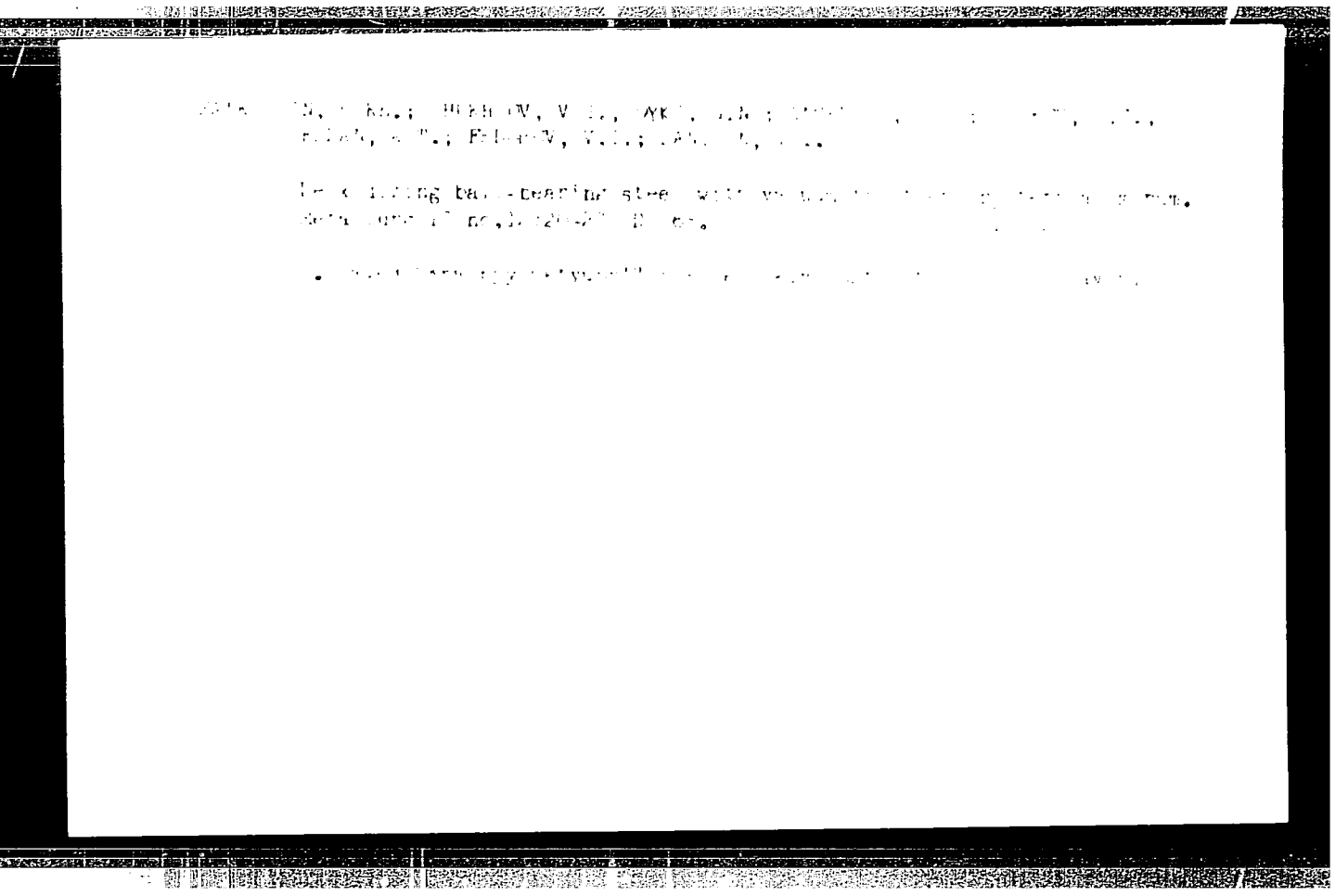

POLEVODOV, A.P.; DANILIN, V.I.; KRASIL'NIKOV, B.G.; VLASOV, I.G.

Press for determining the volume electric resistance of powders at various pressures. Zav. lab. 31 no.11:1417-1418 '65.
(MIRA 19:1)

L 28479-66 EWI(m)/EWA(d)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6010137 SOURCE CODE: UR/0133/66/000/003/0253/0257

AUTHOR: Sidel'kovskiy, M. P. (Candidate of technical sciences); Tyurin, Ye. I. (Candidate of technical sciences); Danilin, V. I. (Candidate of technical sciences); Frantsuzov, S. N. (Engineer); Sinolitskiy, K. A. (Engineer); Stromova, R. P. (Engineer); Antipova, K. I. (Engineer); Selivanov, V. M. (Engineer); Petrov, B. S. (Engineer)

ORG: Volgograd Scientific Research Institute of Machine Building Technology (Volgogradskiy n.-i. institut tekhnologii mashinostroyeniya); Krasnyy Oktyabr' Plant

TITLE: Effect of treatment with minute amounts of boron on the properties of Kh23N18 chromium-nickel steel

SOURCE: Stal', no. 3, 1966, 253-257

TOPIC TAGS: stainless steel, boron, chromium steel, nickel steel, metal melting, weldability, metal scaling / Kh23N18 Cr-Ni stainless steel

ABSTRACT: This effect was investigated for 12 laboratory melts and 45 industrial melts of Kh23N18 stainless heat-resistant chromium-nickel steel (0.08-0.13% C, 1.44--1.82% Mn, 0.20-0.47% Si, 22.05-24.30% Cr, 18.48-19.24% Ni, 0.013-0.033% P, 0.006--0.020% P).(The industrial melts contained 0.18-0.29% Cu.) Boron was added to the laboratory melts in the form of 28% ferroboron prior to tapping, and to the industrial

Card 1/2 UDC: 66.046.51+546.27:669.15 — 194.669.24'25

melts in the form of 10% ferroboron while filling the bottom one-third of the ladle, in proportions of 0.0047-0.0015%. Specimens taken from the ingots, after their hot and cold working, were subjected to microstructural examination and X-ray diffraction analysis. Findings: "microtreatment" with boron affects the structure and phase composition of stainless steels of the Kh23N18 type. At ~1150°C the segregation of a boride phase, clearly visible under an optical microscope, is observed. In the temperature range 1050-1200°C and particularly at 1100-1150°C, treatment with minute amounts of B markedly enhances the plasticity of Kh23N18 steel thus reducing its susceptibility to external defects when rolled in a blooming mill. Under optimal conditions of final deoxidation (with 0.4-0.8 kg of Al per ton) prior to addition of boron, the percentage of defect-free slabs markedly increases and the labor requirement of finishing operations decreases; at the same time, savings of Ni are achieved. (To enhance the effectiveness of treatment with boron, final deoxidation with Al is required, since Al prevents the fixation of B by nitrogen and thus increases the degree of the assimilation of B.) If the B content is 0.003% and more, Kh23N18 steel becomes more prone to cracking during argon-arc welding whereas if the B content is 0.0015% and Al is used as the deoxidant, the weldability of this steel is as good as that of its boron-free counterpart. The addition of B within the limits investigated (up to 0.0047% inclusively) increases the resistance of Kh23N18 steel to scaling at 1000°C and when the B concentrations reach approximately 0.003-0.004%, also at 1100°C. Orig. art. has: 4 figures.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 002

L 38373-66 EWT(m)/T [illegible](t) [illegible]

ACC NR: AT6021370 (A) SOURCE CODE: UR/2631/65/000/007/0091/0095

AUTHOR: Ozeryanaya, I. N.; Krasil'nikova, N. A.; Smirnov, M. V.; Darilin, V. [illegible]

ORG: none

TITLE: Use of the oxygen reference electrode in molten carbonates

SOURCE: AN SSSR, Ural'skiy filial, Institut elektrokhimii. Trudy, no. 7, 1965, Elektrokhimiya rasplavlennykh solevykh i tverdykh elektrolitov; termodinamika i kinetika elektrodnykh protsessov (Electrochemistry of fused salts and solid electrolytes; thermodynamics and kinetics of electrode processes), 91-95

TOPIC TAGS: platinum, oxygen, electrode potential, carbonate, chloride

ABSTRACT: In order to elucidate the stability of the potential of the platinum oxygen reference electrode in molten carbonates under various conditions, the emf of the galvanic cell

$$-Pt,\ CO_2+O_2 \mid Na_2CO_3+K_2CO_3 \mid NaCl+KCl \mid (Cl_2),\ C+$$

was studied at 770-1000°C as a function of temperature and composition of the gas mixture bathing the platinum. One of the half-cells was platinum bathed with a CO_2+O_2 mixture in a molten eutectic mixture of potassium and sodium carbonates, and

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ACC NR: AT6021370

the other was a chlorine electrode in an equimolar mixture of potassium and sodium chlorides. The temperature dependence of the emf, $\mathcal{E} = 0.446+6.40 \times 10^{-4}T$ V, was found to be in good agreement with the thermodynamically calculated quantity for the reaction

$$1/2K_2CO_{3(molten)} + 1/2Na_2CO_{3(molten)} + Cl_{2(gas)} \rightleftharpoons NaCl_{(molten)} + KCl_{(molten)} + CO_{2(gas)} + 1/2\ O_{2(gas)}.$$

This shows the reversibility of the platinum oxygen electrode in carbonate melts. The potential of the platinum electrode in the carbonate melt was studied as a function of the CO_2-O_2 mixtures bathing it. It is shown that for gas mixtures containing over 57.8 mole % CO_2 at temperatures below 900°, the potential of the platinum electrode is described by the equation

$$E = \text{const} + \frac{RT}{2F} \ln P^{1/2}_{O_2} \cdot P_{CO_2}$$

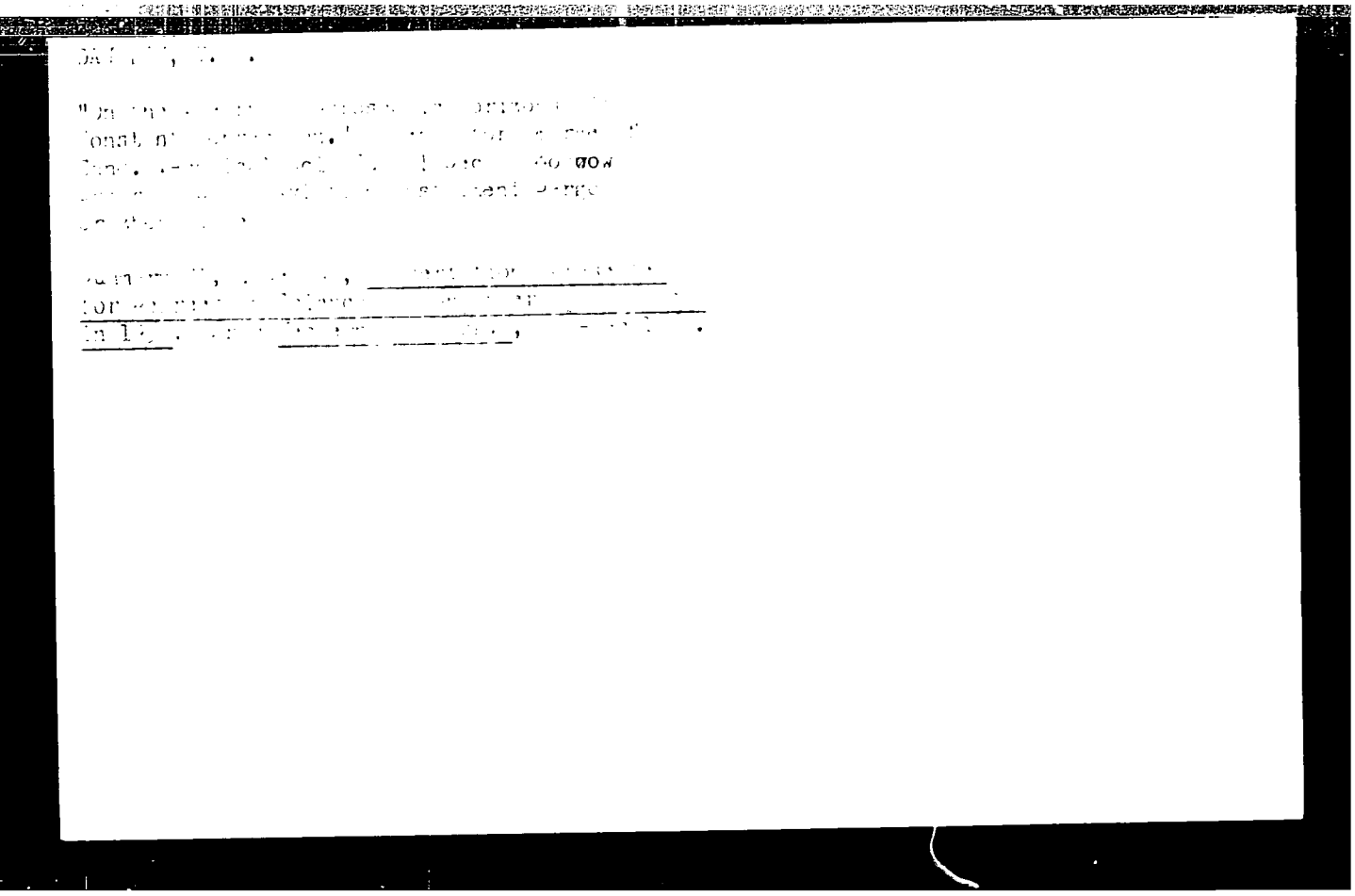
At lower partial pressures of CO_2, particularly in pure oxygen, the potential of the platinum electrode becomes unstable and shifts markedly toward negative values. Orig. art. has: 3 figures and 12 formulas.

SUB CODE: 07/ SUBM DATE: 23Aug65/ ORIG REF: 006/ OTH REF: 008
09/

Card 2/2

DANILIN, Vasiliy Petrovich; TIKHMENEV, S.S., zasl. deyatel' nauki i tekhniki, doktor tekhn. nauk, retsenzent [deceased]; MAKSIMOV, V.V., dots., retsenzent; ARUTYUNOV, S.S., dots., retsenzent; FRIDLENDER, G.O., prof., nauchn. red.; TITOVA, V.A., red.; DANILOVA, V.V., red.

[Gyroscopic instruments] Giroskopicheskie pribory. Moskva, Vysshaia shkola, 1965. 538 p. (MIRA 18:6)



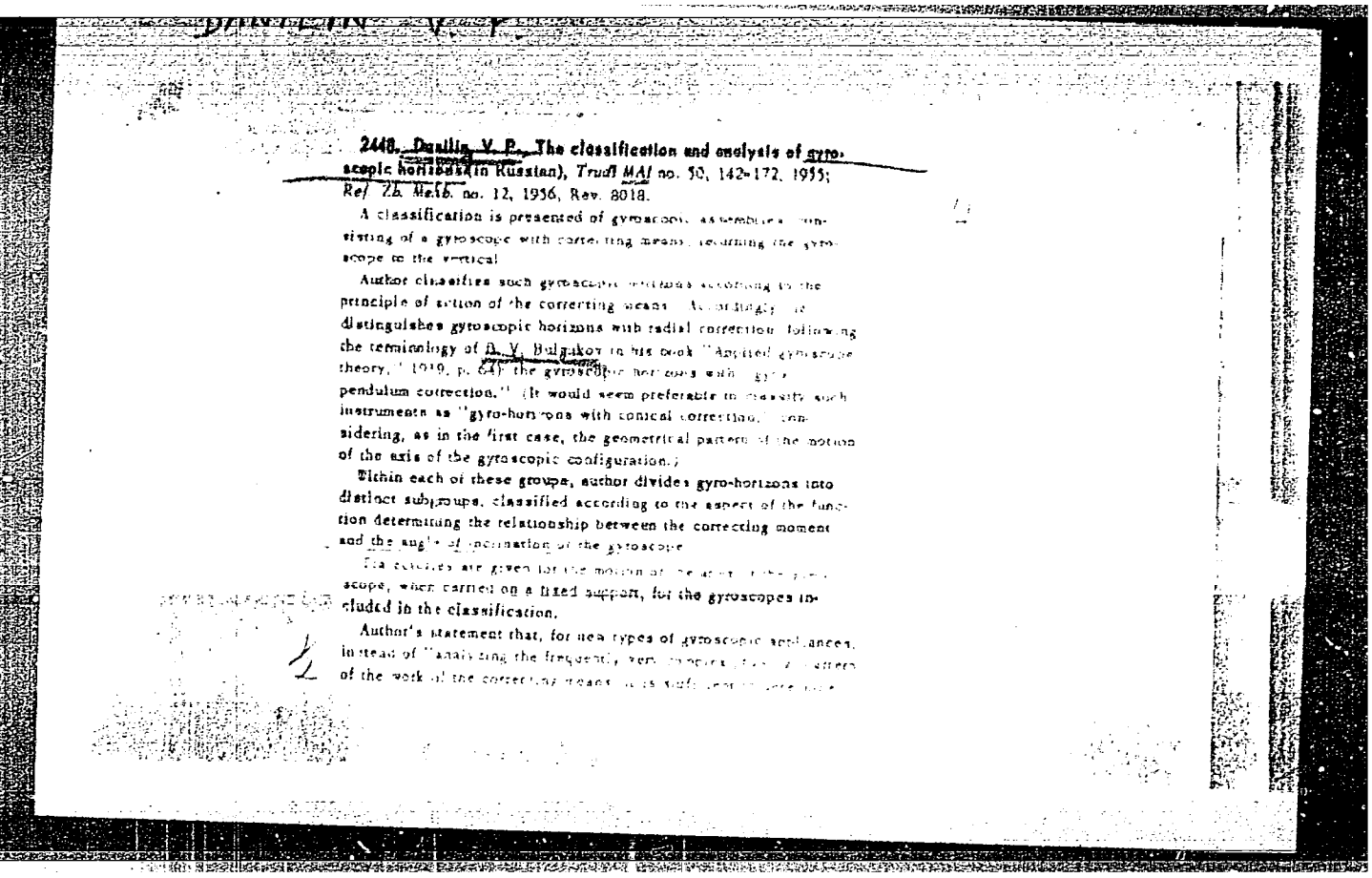
DANILIN, V. P.

"On the Theory of the Behavior of a Gyro-Horizon With Constant Radical Correction During Banking," by V. P. Danilin, Tr. MAI, Issue 41, 1955, pp 155-159 (from Referativnyy Zhurnal -- Mekhanika, No 10, Oct 56, Abstract No 6387, by Ya. N. Roytenberg)

In a banking airplane (with constant linear and angular velocity of the airplane) the motion of the gyro-horizon being studied is represented by two first order nonlinear differential equations (the nutational vibrations of the gyroscope are disregarded).

The state of equilibrium of the upper part of the gyroscope is determined, and it is shown that the trajectory of the gyroscope top approaches this state of equilibrium.

Sum 1219



2448. Dzuliy, V. P. The classification and analysis of gyroscopic horizons (in Russian), *Trudi MAI* no. 50, 142-172, 1955; *Ref. Zh. Mekh.* no. 12, 1956, Rev. 8018.

A classification is presented of gyroscopic assemblies consisting of a gyroscope with correcting means returning the gyroscope to the vertical.

Author classifies such gyroscopic systems according to the principle of action of the correcting means. Accordingly, he distinguishes gyroscopic horizons with radial correction following the terminology of B. V. Bulgakov in his book "Applied gyroscope theory," 1939, p. 64; the gyroscopic horizons with gravity pendulum correction." (It would seem preferable to classify such instruments as "gyro-horizons with conical correction," considering, as in the first case, the geometrical pattern of the motion of the axis of the gyroscopic configuration.)

Within each of these groups, author divides gyro-horizons into distinct subgroups, classified according to the aspect of the function determining the relationship between the correcting moment and the angle of incination of the gyroscope.

Six sketches are given for the motion of the axis of the gyroscope, when carried on a fixed support, for the gyroscopes included in the classification.

Author's statement that, for new types of gyroscopic appliances, instead of "analyzing the frequently very complex [illegible] of the work of the correcting means, it is sufficient [illegible]

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experimentally the pattern of the trajectories of the apex of a gyroscope on a fixed support, and the velocity of motion of the apex along each trajectory, from which data the particular instrument is located in the classification, and such instrument evaluated according to its corresponding group in the classification, with regard to its behavior in the maneuvering of a particular ship or aircraft," appears to be at least disputable.

Ya. N. Roitenberg

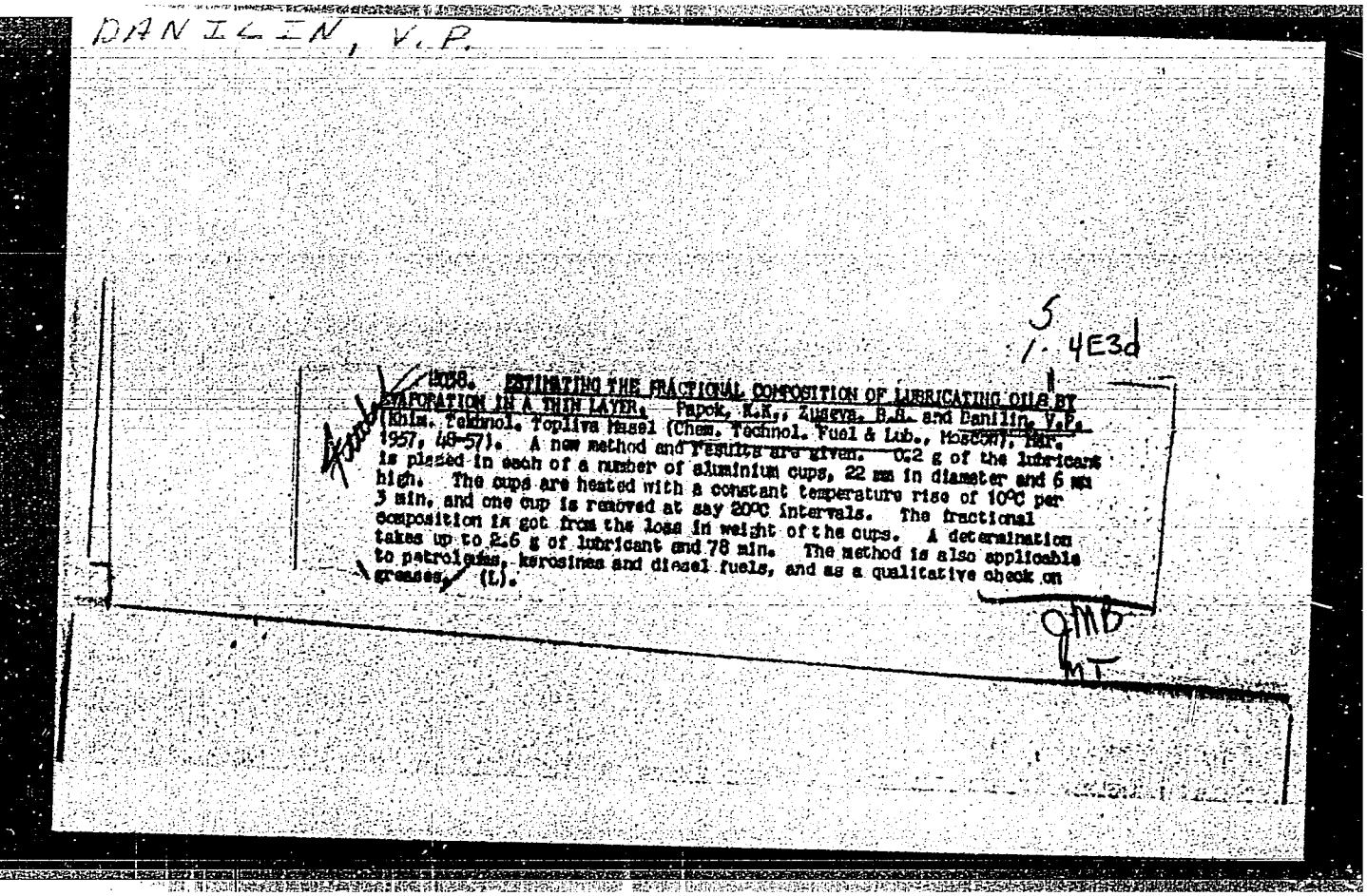
Courtesy Referativnyi Zhurnal, USSR

Translation, courtesy Ministry of Supply, England

#12

DANILIN, V.P., kandidat tekhnicheskikh nauk, dotsent; YURKEVICH, A.P., kandidat tekhnicheskikh nauk, dotsent.

Book review. (Aeronautical gyroscope instruments." V.A. Pavlov. Reviewed by V.P. Danilin, A.P. IUrkevich.) Priborostroenie no.4: 32-p.3 of cover Ap '56. (MLRA 9:8)
(Aeronautical instruments) (Gyroscope) (Pavlov, V.A.)



DANILIN, V.P.

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1058. ESTIMATING THE FRACTIONAL COMPOSITION OF LUBRICATING OILS BY EVAPORATION IN A THIN LAYER. Papok, K.K., Zuseva, E.A. and Danilin, V.P. Khim. Tekhnol. Topliva Masel (Chem. Technol. Fuel & Lub., Moscow), Mar. 1957, 48-57). A new method and results are given. 0.2 g of the lubricant is placed in each of a number of aluminium cups, 22 mm in diameter and 6 mm high. The cups are heated with a constant temperature rise of 10°C per 3 min, and one cup is removed at say 200C intervals. The fractional composition is got from the loss in weight of the cups. A determination takes up to 2.6 g of lubricant and 78 min. The method is also applicable to petrolatums, kerosines and diesel fuels, and as a qualitative check on greases. (L).

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DANILIN, V.P., dots., kand.tekhn.nauk

New method for reducing errors of gyro horizons at turns.
Nauch.dokl.vys.shkoly; mash.i prib. no.1:189-192 '58.
(MIRA 12:1)
1. Predstavleno kafedroy AP-1 Moskovskogo aviatsionnogo instituta.
(Artificial horizons (Aeronautical instruments))

DANILIN, V.K.
P. 2-3

1(1) PHASE I BOOK EXPLOITATION SOV/3491
SOV/11-M-109

Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze

Aviatsionnoye priborostroyeniye i avtomatika; sbornik statey (Instrument Making and Automatic Systems in Aviation; Collection of Articles) Moscow, Oborongiz, 1959. 147 p. (Series: Its Trudy, vyp. 109) Errata slip inserted. 5,200 copies printed.

Sponsoring Agency: USSR, Ministerstvo vysshego obrazovaniya.

Ed.: B. A. Ryabov, Doctor of Technical Sciences, Professor; Ed. of Publishing House: N. A. Gortsuyeva; Tech. Ed.: L. A. Garnukhina; Managing Ed: A. S. Zaymovskaya, Engineer.

PURPOSE: This book is intended for scientific and technical personnel in the field of instrument making and automation, and for students of technical schools of higher education.

COVERAGE: The book is a collection of 10 articles describing certain aspects of aircraft automatic control and regulation and aviation instrument making. The

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articles consist of parts of the authors' dissertations or describe results of scientific research work of the Department of Aircraft Instruments and Automatic Systems of the Moscow Aviation Institute. References are given at the end of some articles.

TABLE OF CONTENTS:

Karagodin, V. M., Candidate of Technical Sciences. A Nonlinear Problem in the Vibration Theory 138

The author considers a mechanical system with one degree of freedom. He studies conservative systems with forces depending on coordinates and velocities. Selfoscillating systems and conservative systems with forces depending only on coordinates are not considered.

AVAILABLE: Library of Congress

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NAKHAMKIN, S.A.; DANILIN, V.P.

Electric coupling of oscillographs in the controlled directional sensitivity method. Trudy MINKHiGP no.26: 40-42 '60. (MIRA 15:6)

(Seismometers)

NAKHAMKIN, S.A.; DANILIN, V.P.

Use of diffracted waves in plotting seismic profiles in the controlled directional sensitivity method. Trudy MINKHiGP no.26:97-112 '60. (MIRA 13:6)
(Aktyubinsk Province--Seismic prospecting)

S/081/62/000/005/083/112
B162/B101

AUTHORS: Papok, K. K., Zarubin, A. P., Zuseva, B. S., Danilin, V. P., Zakharov, G. V., Kuznetsov Ye. G., Slavinskiy, A. G.

TITLE: Set of methods for evaluating the effects of additives on the operating properties of motor oils

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 528-529, abstract 5M216 (Sb. "Prisadki k maslam i toplivam". M., Gostoptekhizdat, 1961, 253-263)

TEXT: It is proposed that the operating properties of motor oils containing additives be evaluated by a series of laboratory methods consisting of 3 groups: (1) micromethods (total consumption of oil, 10 ml), (2) tests on [illegible] (PZV) and [illegible] (PDS) apparatus (total consumption of oil, 0.5 l) and (3) tests on the [illegible]9-5 (IT9-5) and [illegible]9-3 (IT9-3) single cylinder engines (total consumption of oil, 2.5 l). The first group covers determination of: thermooxidizing stability and coefficient of lacquer formation [illegible] 4953-49 (GOST 4953-49) and [illegible] 9352-60 (GOST 9352--60)), motor volatility, active fraction and tendency to form lacquer

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Set of methods ...

(5737-53 (GOST 5737-53)), thin-layer evaporation of the oil (8671-58 (GOST 8671-58)), critical lacquer formation temperature (method described) and the scale-forming properties by evaporating 0.2 g of oil in an aluminum cup at 400°C until a carbon residue is formed (method described). On the PZV apparatus, they evaluate the washing properties of the oil according to 5726-52 (GOST 5726-52) and the emulsifying properties (method described). In the test on the PZV apparatus the oil is mixed with air and circulated at 150°C through a cell with lead and copper plates, and after 2 hrs circulation the corrosion of the lead plates is determined, the sediment in the oil on diluting with isooctane and the evaporation of the oil during the test (method described). On the IT9-5 engine primary motor tests are carried out by the NII DSM-20 method for 20 hrs, evaluating the formation of lacquer on the piston and the corrosion properties of the oil from the loss in weight of the lead plates in the cell through which the working oil circulates. On the IT9-3 engine the scale-forming capacity of the oil is evaluated by the PZI (method described), by which the quantity of scale on aluminum surfaces

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Set of methods ...

in the precombustion chamber of the engine is determined, the oil being added in a quantity of 5 % to the fuel (T-1 (TS-1) or white spirit) and five-minute tests being carried out for each oil sample. The results of the evaluation of oils with different additives using these methods are given. Abstracter's note: Complete translation.

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S/065/62/000/006/005/007
E194/E436

11,9100

AUTHORS: Lapok, K.K., Danilin, V.P.

TITLE: High temperature properties of lubricating oils

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.6, 1962, 54-58

TEXT: The carbon residue which is commonly used to assess the deposit forming tendencies of lubricating oils is considered to be unreliable measure. The following procedure is accordingly recommended to assess the deposit forming tendencies of lubricating oils. A 0.2 g sample of oil contained in an open aluminium vessel is placed in the standard apparatus for assessing lacquer forming tendencies (GOST 4953-49 (GOST 4953-49)) on a disc at a temperature of 400°C. When evaporation of the oil has visibly ceased the lid is placed on the vessel and it is maintained at the same temperature for the same time as was required to complete evaporation. The vessel is then removed from the disc, cooled and weighed and the amount of deposit formed is expressed as a percentage of the oil sample. Two parallel tests are conducted and the mean values taken, the difference between them should not exceed the following figures: for residue up to 3%

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